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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,634	02/21/2002	Toshiaki Shimada	SIW-033	1953
959	7590	03/18/2004	EXAMINER	
LAHIVE & COCKFIELD, LLP.			LE, HOA VAN	
28 STATE STREET			ART UNIT	
BOSTON, MA 02109			PAPER NUMBER	
			1752	

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/081,634

**Applicant(s)**

SHIMADA ET AL.

**Examiner**

Hoa V. Le

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-17 is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 21 February 2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

This application is before the examiner for consideration on the merits.

I. (1) The invention in the specification has been carefully studied.

(a) There is no new chemical ingredient or material being discovered or applied in the instant application.

(b) The claimed invention is considered, treated and searched as conceptual only since no material is demonstrated or reduced to practice to obtain any result or advantage.

© There are multiple groups of the claims (1-9), (10-13) and (14-17) but there is no evidence on the record that:

(i) there are two or more separately and patentably different or distinct inventions that would require and request for separate considerations and searches. No request of such issue on the record for a proper and timely consideration.

(ii) There may not allow more than one invention to be considered and searched at the same time unless applicant provide an evidence that there is no need for a separate consideration or search for an additional invention. Generally an additional consideration or search of an additional invention is burdensome. Applicant is urged to provide a convincing evidence to the contrary.

(iii) Accordingly, the first broadest independent claim 1 is considered as the main invention. Others are secondary. Therefore, no restriction or election of species is made. No separate consideration or search is made also. Should

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applicant shows or urges otherwise in the next response to this Office Action in order for it to be considered timely, a restriction will be made for the record as shown or urged.

II. Applicants prior art submission filed on 21 February 2002 has been considered to readable sections as provided only.

III. The counsel for Honda... fail to bring to the Office attention that there is a very closely related application with respect US 2002/0045079.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. '079. Although the conflicting claims are not identical, they are not patentably distinct from each other because they contain or share the same or about same limitations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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IV. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 with the first broadest independent claim 1 as the main invention are rejected under 35 U.S.C. 103(a) as being unpatentable over Seiichi in Description of Japanese Abstract '196 as submitted (An English language of the application is requested and required to be submitted before or at the time of filing an appeal brief. Otherwise, the brief will not be considered and dismissed. Applicants are now notified for the record).

Seiichi discloses, teaches and suggests a hydrogen supplying device comprising a tank containing in it a hydrogen occlusion alloy, hydrogen atoms, a heater, a connecting line, a controlling valve. Please see the abstract as submitted. Since Seiichi discloses, teaches and suggests the main and essential embodiments of the claims, they are found to be rendered prima facie obvious by Seiichi.

V. Claims 1-11 with the first broadest independent claim 1 as the main invention are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumi et al (5,229,222 and 5,366,820), Kagatani (6,459,231), Horiguchi (6,468,681), Horiguchi et al (US 2002/0025460) and Sahoda (2003/0077489).

Tsutsumi et al '222 disclose, teach and suggest a hydrogen supplying device comprising a tank containing in it a hydrogen occlusion alloy, hydrogen atoms, a heater, a connecting line, a

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controlling valve. Please see the disclosure of each of the applied references, especially in Tsutsumi et al '222 at figures 1, 4-7 and 9-13, their descriptions, col.3:50-64, 4:33-36, 5:5-18, 6:12-55, 7:8-27, Experiments, claims. A careful study of the instant application unveils that there is (1) no new or novel chemical ingredient or material be in discovered or applied in the claimed invention and (2) no material is demonstrated or reduced to practice. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite the conventional or known chemical ingredients or materials in the art in the absence of a demonstration or reduction the practice for it operative unusual or unexpected results for their patentability. Applicants are urged to show or provide a convincing evidence to the contrary for each of the additional conventional or known chemical ingredients or materials with their known functional properties for a patentability of each of them in the next response to this Office action in order for each of them to be considered timely. Otherwise, it would be late in a response to a final Office action. Accordingly, none of them will be considered. However, Tsutsumi et al '820 at the claims, Kagatani at figure 2, its description, col.9:20-33, Horiguchi at figures 1, 5-8, their descriptions, col.2:11-18, 5:15-22, and 46-49, 6:19-63, 7:33-39, Horiguchi et al at figures 1, 3 and 6, their descriptions, paragraphs 0046, 0052 to 0054, 0057, Sahoda at figures 1 and 8, paragraphs 0023 to 0028, 0034, 0045 to 0048, 0053, 0056 to 0057, 0062, 0068 to 0072 are cite to show conventional and known heaters, connecting lines and flow rate controls in a conventional and known fuel cell. Since the above references are related to hydrogen supplying devices for a conventional or known fuel cell, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include or cite the known a hydrogen occlusion alloys, heaters, connecting lines, controlling valves and flow rate controls for their functional properties

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in the art for the same desire advantage as disclosed, taught and suggest in the secondary references.

VI. Claims 12-17 are allowable for the conceptual embodiments in the claims with respect to the heat control calculation unit and its use to regulate and control a hydrogen flow rate since the references are related to look up table in a electronic memory only.

VII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:00 AM to 4:00 PM on Monday through Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on 571-272-1385. The fax phone numbers of the examiner is 571- 273-1332. Since there is a newly electronic filing procedure for all initial communicating papers and all responses to an Office action, the examiner fax phone number is not for use to receive any fax in response to an Office action. Applicant is requested and required to send all initial communicating papers and all response to Office action to a central paper or fax receiving center for an electronic scanning procedure.

Applicants may file a paper by (1) fax with a central facsimile receiving number 703-872-9306,

(2) mail with a central mail receiving address:

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le  
Primary Examiner  
Art Unit 1752

HVL  
11 March 2004

A handwritten signature in black ink that reads "Hoa V. Le". The signature is written in a cursive, flowing style.